

Appl. No. 10/723,515
Amdt. dated January 6, 2006
Reply to Office Action of October 6, 2005
Attorney Docket 17515

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) A wheeled vehicle comprising:
 - a bottom chassis;
 - a top chassis, which is coupled to said bottom chassis so that it is able to turn about a vertical axis;
 - an operating arm coupled to said top chassis;
 - an axle, which is coupled to said bottom chassis so that it can oscillate about a longitudinal axis of the vehicle;
 - a plurality of wheels disposed on said axle;
 - blocking means disposed between said bottom chassis and said axle for angularly blocking said axle about said longitudinal axis with respect to said bottom chassis;
 - a circuit to activate said blocking means and inhibit oscillation of said axle about said longitudinal axis; and
 - an angle sensor for supplying a signal indicative of the angular position of said operating arm about said vertical axis with respect to said bottom chassis.
2. (original) The vehicle according to Claim 1, wherein said circuit comprises a blocking means switch for activating said blocking means according to said signal.
3. (currently amended) The vehicle according to Claim 2, A wheeled vehicle comprising:
a bottom chassis;
a top chassis, which is coupled to said bottom chassis so that it is able to turn about a vertical axis;
an operating arm coupled to said top chassis;
an axle, which is coupled to said bottom chassis so that it can oscillate about a longitudinal axis of the vehicle;
a plurality of wheels disposed on said axle;
blocking means disposed between said bottom chassis and said axle for angularly blocking said axle about said longitudinal axis with respect to said bottom chassis;
a circuit to activate said blocking means and inhibit oscillation of said axle about said longitudinal axis, wherein said circuit comprises a blocking means switch for activating said

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blocking means according to said signal;

an angle sensor for supplying a signal indicative of the angular position of said operating arm about said vertical axis with respect to said bottom chassis; and

further comprising a braking sensor for detecting braking of said wheels, wherein said circuit comprises a braking switch for activating said blocking means automatically in the presence of said braking.

4. (original) The vehicle according to Claim 3 wherein said blocking means and braking switches are set in series with respect to one another.

5. (original) The vehicle according to Claim 4, wherein said circuit comprises an electrical control circuit; said blocking means and braking switches comprise respective electrical contacts switchable so that they open said circuit and activate said blocking means.

6. (original) The vehicle according to Claim 5, wherein said blocking means switch comprises a relay switchable by said signal.

7. (original) The vehicle according to Claim 6, wherein said braking sensor comprises a pressure transducer set in a system for braking the vehicle.

8. (original) The vehicle according to Claim 7, wherein said circuit comprises a manual-control switch, which may be switched to an open position by a driver of the vehicle for opening the control circuit and activating said blocking means.

9. (original) The vehicle according to Claim 1, wherein said angle sensor comprises a first conductive element and a second conductive element, which are mobile with respect to one another according to the relative rotation between said operating arm and said bottom chassis about said vertical axis; said first and second conductive elements being set electrically in contact when the angular position of said operating arm is within a predetermined angular range with respect to said longitudinal axis.

10. (original) The vehicle according to Claim 1, further comprising a joint disposed between said top chassis and said bottom chassis and comprising said angle sensor.

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11. (original) The vehicle according to Claim 10, wherein said joint comprises a set of electrical contacts, each comprising a conductive brush carried by one of said top chassis and said bottom chassis, and a disk, which is carried by the other of the top chassis and said bottom chassis and is able to turn with respect to said brush coaxially with said vertical axis; said angle sensor comprising one brush and a conductive portion of one corresponding disk.

12. (original) The vehicle according to Claim 11, wherein said conductive portion is defined by a circular sector of said disk and the remaining part of said disk being nonconductive.